

CLAIM AMENDMENTS:

Claim 1 (canceled).

Claim 2 (currently amended): A method of water analysis in a semiconductor manufacturing process for detecting ~~the~~ a presence of microorganisms in a water sample, comprising ~~the steps of:~~

providing a ~~bio-membrane~~ membrane as a filter;

filtering out the microorganisms in the water sample, using the ~~bio-membrane~~ membrane;

~~cultivating~~ growing the microorganisms on the ~~bio-membrane~~ membrane;

staining the microorganisms on the ~~bio-membrane~~ membrane with potassium permanganate (KMnO₄);

rinsing the ~~bio-membrane~~ membrane with purified deionized water; and

performing a colony count for ~~the readable~~ microorganisms on the ~~bio-membrane~~ membrane.

Claim 3 (currently amended): The method of water analysis according to claim 2, wherein ~~the~~ a pore size of the ~~bio-membrane~~ membrane is about 0.3 μm in diameter.

Claim 4 (currently amended): The method of water analysis according to claim 2, wherein the water sample is filtered through the ~~bio-membrane~~ membrane by a vacuum filtration technique.

Claim 5 (currently amended): The method of water analysis according to claim 2, wherein the microorganisms are cultivated on the ~~bio-membrane~~ membrane at about 30°C, using 2 ml of nutrient solution.

Claim 6 (original): The method of water analysis according to claim 2, wherein the concentration of KMnO_4 is about 0.02 M (mole per liter).

Claim 7 (currently amended): The method of water analysis according to claim 2, wherein after the microorganisms on the ~~bio-membrane~~ membrane are stained with KMnO_4 for about 10 to 30 seconds, ~~and then the bio-membrane~~ membrane is rinsed with purified deionized water.

Claim 8 (currently amended): A method of water analysis in a semiconductor manufacturing process for separately detecting ~~the a~~ a presence of microorganisms in a plurality of water samples, comprising ~~the steps of:~~

providing a plurality of ~~bio-membranes~~ membranes as filters;

filtering out the microorganisms in each of the water samples, using a corresponding one of the bio-membrane membranes, separately;

~~cultivating~~ growing the microorganisms on different ~~bio-membranes~~
membranes for different times ~~period~~;

staining the microorganisms on each of the ~~bio-membranes~~ membranes
with potassium permanganate (KMnO₄);

rinsing each of the ~~bio-membranes~~ membranes with purified deionized
water; and

performing a colony count for ~~readable~~ the microorganisms on each of the
~~bio-membranes~~ membranes.

Claim 9 (currently amended): The method of water analysis according to
claim 8, wherein ~~the a~~ pore size of the ~~bio-membrane~~ membrane is about 0.3 μ m
in diameter.

Claim 10 (currently amended): The method of water analysis according to
claim 8, wherein each of the water samples is filtered through a corresponding
~~bio-membrane~~ membrane by a vacuum filtration technique.

Claim 11 (currently amended): The method of water analysis according to
claim 8, wherein the microorganisms are cultivated on each of the ~~bio-membranes~~
membranes at about 30°C, using 2 ml of nutrient solution.

Claim 12 (currently amended): The method of water analysis according to claim 8, wherein the microorganisms on each of the ~~bio-membranes~~ membranes are cultivated for 24, 48, 72, and 96 hours, respectively.

Claim 13 (original): The method of water analysis according to claim 8, wherein the concentration of KMnO_4 is about 0.02 M (mole per liter).

Claim 14 (currently amended): The method of water analysis according to claim 8, wherein the microorganisms on each of the ~~bio-membrane~~ membranes are stained with KMnO_4 for about 10 to 30 seconds.